

AURORA'S ENGINEERING COLLEGE

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lab manual of
MICROPROCESSORS & MICROCONTROLLERS LAB

B.Tech 4th Year 1st Sem-EEE
(R09 Regulation)

DEPARTMENT OF
ELECTRONICS AND COMMUNICATION ENGINEERING
2014-15

PREFACE

The purpose of this laboratory is to enable students to write efficient programs in assembly language for 8086 microprocessor and to assemble and execute them using TASM software and as well as in 8086 microprocessor trainer kits. Students will learn techniques for interfacing the 8086 microprocessor to peripheral devices like ADC, DAC and stepper motor. As a result, they themselves can design and develop various interesting applications involved with microprocessor as well as complete microprocessor based system.

Microcontrollers are being extensively used in today's industrial environment and research and development. Therefore, students will learn to write basic assembly language programs and interfacing programs for 8051 microcontroller also.

CODE OF CONDUCT

1. Students should report to the concerned laboratory as per the time-table.
2. Students who turn up late to the lab will in no case be permitted to perform the experiment scheduled for the day.
3. After completion of the experiment, certification of the concerned staff in-charge in the observation book is compulsory.
4. Students are expected to conduct themselves professionally, and to keep their bench areas clean and organized. Again they are required to return all the equipment and components used in the experiment to their proper places before leaving the lab.
5. Lab reports will consist of your program listing.
6. In a particular lab session if a student completes the experiment, due on that date, ahead of time, he may choose to work on any of the previous experiments he may have attempted and was unable to get it to work. Not allowed to work on an experiment that he may not have worked on previously.
7. The tools and instruments in the lab are not supposed to be misplaced in the laboratory.
8. The Laboratory Assistant is available to help the student in debugging the software or troubleshooting the hardware, but it is not the responsibility of the Lab Assistants to make the experiment work. It is therefore the responsibility of the student to complete the experiment.
9. There will be a make up lab session at the end of the semester. During that session student will be allowed to do at most two experiments that he is offered to work on. Note that this is an opportunity being afforded to you so that you may work again on an experiment you previously attempted but were unsuccessful. If you did not work on an experiment during a previous lab session you will not be allowed to make it up during the make-up session.
11. There will be two internal practical examinations, consisting of a program that he is expected to write, debug, and demonstrate and every student will work alone during the final exam.

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